



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,615	09/18/2003	Anatoly Z. Rosenflanz	58354US002	9899
32692	7590	12/12/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 12/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/666,615

Applicant(s)

ROSENFLANZ, ANATOLY Z.

Examiner

Michael A. Marcheschi

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6,8,11,35,37,40 and 62-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,62-72,76-78,86-88,97,106 and 114 is/are rejected.
- 7) ☒ Claim(s) 8,11,35,37,40,73-75,79-85,89-96,98-105,107-113,115 and 116 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1755

Claims 6, 62-72, 76-78, 86-88, 97, 106 and 114 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite as to the limitation “wherein the glass comprises  $\text{ZrO}_2$ ,” as defined in line 6, because line 4 already defines that this component is present.

Claim 66 is indefinite because “crushing to provide particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Claim 67 is indefinite because “grading the abrasive particles to provide a plurality of particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Claim 68 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Claim 76 is indefinite because “crushing to provide particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Claim 77 is indefinite because “grading the abrasive particles to provide a plurality of particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Art Unit: 1755

Claim 78 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Claim 86 is indefinite because “crushing to provide particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Claim 87 is indefinite because “grading the abrasive particles to provide a plurality of particles” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making abrasive particles and not a method of making a glass ceramic.

Claim 88 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making a glass ceramic. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Claim 97 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making abrasive particles. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Claim 106 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making abrasive particles. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Claim 114 is indefinite because “incorporating abrasive particles into an abrasive article” does not further limit a method of making abrasive particles. This method step would appear to be defining a method of making an abrasive article and not a method of making a glass ceramic.

Art Unit: 1755

In the above rejection of claims 66-68, 76-78, 86-88, 97, 106 and 114, these claims should be canceled or properly amended to establish the proper method sought (i.e. written in independent form or dependent from a newly written independent claim.).

Claim 6 would be allowable if amended to overcome the indefinite rejections.

Claims 62-65 and 69-72 would be allowable if claim 6 is amended to overcome the indefinite rejection.

Claims 66-68, 76-78, 86-88, 97, 106 and 114 should be canceled.

Claims 8, 11, 35, 37, 40, 73-75, 79-85, 89-96, 98-105, 107-113, 115 and 116 are allowable.

The prior art of record fails to teach or suggest a glass-ceramic having the claimed alumina content, the claimed zirconia content and all of the claimed contents defined in claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM  
11/06

Michael A Marcheschi  
Primary Examiner  
Art Unit 1755

